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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,632	12/01/2000	David Scott Groothuis	30694	4777

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EXAMINER

PHAM, HOA Q

ART UNIT PAPER NUMBER

2877

DATE MAILED: 07/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/727,632

Applicant(s)

GROOTHUIS ET AL.

Examiner

Hoa Q. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-18 and 20-30 is/are rejected.
- 7) ☒ Claim(s) 5 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,6. 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. The "Pre-amendment" filed on 8/1/01 has not been entered because the "clean version" is not matched with the "marked-up version". Should the specification be amended as in the "marked-up version"?

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 1, lines 4 and 6 is vague and indefinite because it is not clear if " a laser assembly" in line 4 is the same as "a laser assembly" in line 6.

b. Claim 2, line 1; claim 3, lines 1-2; claim 4, line 1; claim 6, lines 1-2, claim 7, line 1; It is not clear which "laser assembly" is referred to?

c. Claim 20 recites the limitation "said detector" and "said laser assembly" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

d. Claims 5, 7-14 are dependent, therefore inherit the deficiencies of the claims on which they depend.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 6-7, 13, 15, 20, 21, 27-28 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danielson et al (5,801,834) in view of Melocik et al (4,564,085).

Regarding claims 1, 15, and 29-30; Danielson et al (of record) discloses a vehicle straightener measuring unit which has all the features of the present invention except that each laser unit includes a pair of individual laser beams spaced vertically from each other by a known distance toward the target; however, such a feature is known in the art as taught by Melocik et al. Melocik et al, from the same field of endeavor, discloses a controlling arrangement for aligning material handling vehicle in which the light unit (48) includes a pair of light beams (60,64) spaced vertically from each other by a known distance (A) toward the targets (40,44) (see figure 1, column 3, lines 49-55, claim 11 lines 22-40). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the laser unit of Danielson et al by the laser unit of Melocik et al. the rationale for this modification would have arisen from the fact that using the unit of Melocik et al would increase the accuracy of the alignment. In addition, the three and four individual three-dimensional coordinates are easy to obtain.

Regarding claims 6 and 20, Melocik et al teaches that the light sources (68,72) are located adjacent to detector (96) (see figure 3).

Regarding claims 7 and 21, see column 6 lines 49-52 of Danielson et al for scanning 360 degrees circle.

Regarding claim 27, see reflective laser beam targets (12, 14, 24) in figure 1 of Danielson et al.

Regarding claims 13 and 28, Danielson et al teaches that the targets being individually coded (column 6, line 55).

6. Claims 2-4, 8-12, 14, 16-18, 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Danielson et al and Melocik et al as applied to claims 1, 6-7, 13, 15, 20, 21, 27-28 and 29-30 above, and further in view of Kunze et al (4,015,338) and Fiedler (3,816,000).

Regarding claims 2-4, 8, 16-18, 22, Danielson et al does not explicitly teach that the laser assembly including a pair of laser units; however, such a feature is known in the art as taught by Kunze et al. Kunze et al, from the same field of endeavor, teaches that light assembly (8) includes a pair of light units each projecting a light beam (8') (see figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to arrange the laser assembly of Danielson et al as an arrangement of Kunze et al because this is a known arrangement which is known to serve for the purpose of Danielson et al of determining the deformation of a vehicle body.

Regarding claims 9-12, 14, 23-26, Fiedler teaches the use of two parallel light beam for the purpose of alignment and the alignment can be determined on the basis of calculation of three-dimensional spatial coordinates of targets (column 9 lines 59-65). It

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would have been obvious to one having ordinary skill in the art at the time the invention was made to include in Danielson et al and Melocik et al the use of different method of alignment, for example, the method of Fiedler because they are equivalent in function. A substitution one for another is recognized as being within the level of ordinary skill in the art.

***Allowable Subject Matter***

7. Claims 5 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

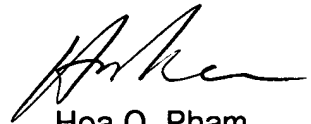
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Following references are relative to alignment system: Sadeh et al (5,035,503), Espinoza et al (6,347,457), Groothuis et al (D457,161), Jarman et al (4,513,508) and Palombi (5,029,397).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (703) 308-4808. The examiner can normally be reached on 6:30 AM to 5 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703) 308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Hoa Q. Pham  
Primary Examiner  
Art Unit 2877

HP  
June 28, 2003